5

10

15

ABSTRACT

SYSTEM AND METHOD OF TIMECODE REPAIR AND SYNCHRONIZATION IN MPEG STREAMS

A method, apparatus and article of manufacture is provided for processing a previously encoded MPEG video high-resolution (HR) file and corresponding proxy file, for frame accurate timecode repair and synchronization of individual video frames of the HR and proxy files. Each video frame header of the HR and proxy files is modified by a compressed timecode packet having an identifying signature, an absolute timecode of the frame, and a relative timecode of the frame. The timecodes have the SMPTE timecode format HH:MM:SS:FF. The method automatically verifies the timecodes in the HR and proxy files timecode packets. If a repair of the HR file anomalous absolute timecodes is needed, the method automatically corrects the anomalous absolute timecodes in the HR file. If the proxy file starting video frame is offset from the HR file starting video frame, the method automatically synchronizes the proxy and the HR files absolute and relative timecodes.